



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About...Human Metapneumovirus

What is human metapneumovirus?

Human metapneumovirus (hMPV) was discovered in 2001, and has been shown to cause acute respiratory tract illness in patients of all ages, but most commonly in young children, the elderly, and the immunocompromised. Human metapneumovirus is one of the leading causes of bronchiolitis in infants and also causes pneumonia, asthma exacerbations, croup, and upper respiratory tract infections (URIs). Otherwise healthy people infected with hMPV usually have mild or moderate symptoms, but some people may develop severe disease requiring hospitalization.

Serologic studies suggest that all children are infected at least once by 5 years of age. Recurrent infection occurs throughout life and, in healthy people, usually is mild or asymptomatic.

How is human metapneumovirus spread?

Formal transmission studies have not been reported, but transmission is likely to occur by direct contact with respiratory secretions (either through sneezing or coughing or by touching surfaces with the virus on them). Annual epidemics usually occur in late winter and early spring.

Who is at risk for human metapneumovirus?

Serologic studies suggest that all children are infected at least once by 5 years of age. Recurrent infection occurs throughout life and, in healthy people, usually is mild or asymptomatic. However, recent studies have indicated that older persons or persons with a weakened immune system may be at risk.

How do I know if I have human metapneumovirus?

See your health care provider. Limited diagnostic testing is available through reference and commercial labs.

What are the symptoms of human metapneumovirus?

Otherwise healthy people infected with hMPV usually have mild or moderate symptoms, but some people may develop severe disease requiring hospitalization. Symptoms of mild disease include:

- Cough
- Runny nose
- Nasal congestion
- Sore throat
- Fever

Symptoms of more severe disease include:

- High fever
- Severe cough
- Difficulty breathing
- Abnormally rapid breathing
- Wheezing
- Vomiting
- Diarrhea

Symptoms of human metapneumovirus usually start 3-5 days after exposure.

How is human metapneumovirus treated?

Treatment is supportive and includes fever reducers, antihistamines, hydration and supplemental oxygen if necessary.

How is human metapneumovirus prevented?

Frequently and thoroughly wash hands, especially if you are ill or caring for others who are ill. Cough or sneeze into your upper sleeve, and discard used tissues promptly.

All information presented is intended for public use. For more information, please refer to the American Lung Association Web site:

<http://www.lungusa.org/lung-disease/human-metapneumovirus/>

Human metapneumovirus is not a reportable disease in Indiana and is not included in the Communicable Disease Report.

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